

Claims

1. A method for applying a sample film to a sample carrier for subsequent spectroscopic analysis, comprising:

- providing a quantity of sample in liquid state;
- providing a sample carrier having at least one sample position;
- applying said quantity of sample in liquid state on said at least one sample position in a plurality of partial quantities of said quantity of sample in such a manner that said partial quantities on said at least one sample position are not in contact with one another before being dried;
- drying said quantity of sample to form said sample film.

2. The method of claim 1, wherein said partial quantities of said quantity of sample are applied to said at least one sample position in form of a fine grid with a maximum occupation density.

3. The method of claim 1, wherein said partial quantities amount to from about $1/10,000$ to about $1/10$ of said quantity of sample to be applied to said at least one sample position.

4. The method of claim 1, wherein said applying said quantity of sample in liquid state on said at least sample position comprises first applying a first layer of said partial quantities to said at least one sample position, drying said first layer and applying at least one further layer of partial quantities of said quantity of sample to said at least one

sample position and drying said at least one further layer of partial quantities.

5. The method of claim 4, further comprising applying said partial quantities belonging to said at least one further layer to said at least one sample position such that said partial quantities of said at least one further layer are offset with respect to positions of said partial quantities belonging to said first layer.

6. The method of claim 1, wherein said applying said quantity of sample in liquid state on said at least sample position comprises first applying a first layer of said partial quantities to said at least one sample position, drying said first layer and applying at least one further layer of partial quantities of said quantity of sample to said at least one sample position and drying said at least one further layer of partial quantities, wherein said partial quantities belonging to said at least one further layer are applied to positions of said partial quantities belonging to said first layer.

7. The method of claim 1, further comprising heating said sample carrier.

8. The method of claim 1, wherein a plate made from transparent material is used as said sample carrier.

9. The method of claim 8, wherein said plate is made from infrared(IR)-transparent material.

10. The method of claim 1, wherein a plate whose surface is roughened is used as said sample carrier.

11. The method of claim 1, wherein said sample carrier is used as a sample carrier having a plurality of sample positions.

12. A method for applying a sample film to a sample carrier for subsequent spectroscopic analysis, comprising:

- providing a quantity of sample in liquid state;
- providing a sample carrier having at least one sample position;
- applying a first layer of a plurality partial quantities of said quantity of sample in liquid state on said at least one sample position in such a manner that said partial quantities of said first layer on said at least one sample position are not in contact with one another before being dried;
- drying said first layer of said partial quantities on said sample position;
- applying at least one further layer of a plurality partial quantities of said quantity of sample in liquid state on said at least one sample position in such a manner that said partial quantities of said at least one further layer on said at least one sample position are not in contact with one another before being dried;
- drying said at least said further layer of said plurality of said partial quantities on said sample position.

13. The method of claim 12, further comprising applying said partial quantities belonging to said at least one further

layer to said at least one sample position such that said partial quantities of said at least one further layer are offset with respect to positions of said partial quantities belonging to said first layer.

14. The method of claim 12, further comprising applying said partial quantities belonging to said at least one further layer to positions of said partial quantities belonging to said first layer.

15. The method of claim 12, wherein said partial quantities of said quantity of sample are applied to said at least one sample position in form of a fine grid with a maximum occupation density.

16. The method of claim 12, wherein said partial quantities amount to from about 1/10,000 to about 1/10 of said quantity of sample to be applied to said at least one sample position.

17. The method of claim 12, further comprising heating said sample carrier.

18. The method of claim 12, wherein a plate made from transparent material is used as said sample carrier.

19. The method of claim 18, wherein said plate is made from infrared(IR)-transparent material.

20. The method of claim 12, wherein a plate whose surface is roughened is used as said sample carrier.

21. The method of claim 12, wherein said sample carrier is used as a sample carrier having a plurality of sample positions.